

ABSTRACT

The present invention intends to render quantization noise virtually imperceptible for a user and to prevent reduction in frequency resolution and reduction in encoding efficiency.

A signal encoding apparatus includes: a quantization unit for quantizing an input signal based on a plurality of quantization methods; a dequantization unit for obtaining decoded signals by performing the dequantizing process; an error signal calculation unit for calculating a plurality of error signals between the decoded signals and the input signal; a weighting calculation unit for calculating, for each subblock, a weight related to degree concerning whether or not quantization noise corresponding to error signal is virtually imperceptible for a user; a quantization method selection unit for selecting a given quantization method from among the plurality of quantization methods, when a plurality of weighted error signals, obtained by assigning a weight of each subblock to an error signal of the subblock, are generated, based on the of weighted error signals; and an output unit for outputting the input signal quantized based on the given quantization method as an output signal.